MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER **1, 2018/2019 SESSION**

TSO 7021 – Service Oriented Architecture Using Web Services

(All sections / Groups)

1 OCTOBER 2018
8.00 p.m - 10.00 p.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 4 pages only.

2. Answer all the questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write your answers in the Answer Booklet provided.

Question 1

a) Lazada is one of the leading e-commerce company that sells many items from many sellers. Explain how Lazada can transform its functionality into services based on Service Oriented Architecture so that the e-commerce functionalities can be programmed and integrated into various platforms. [4 marks]

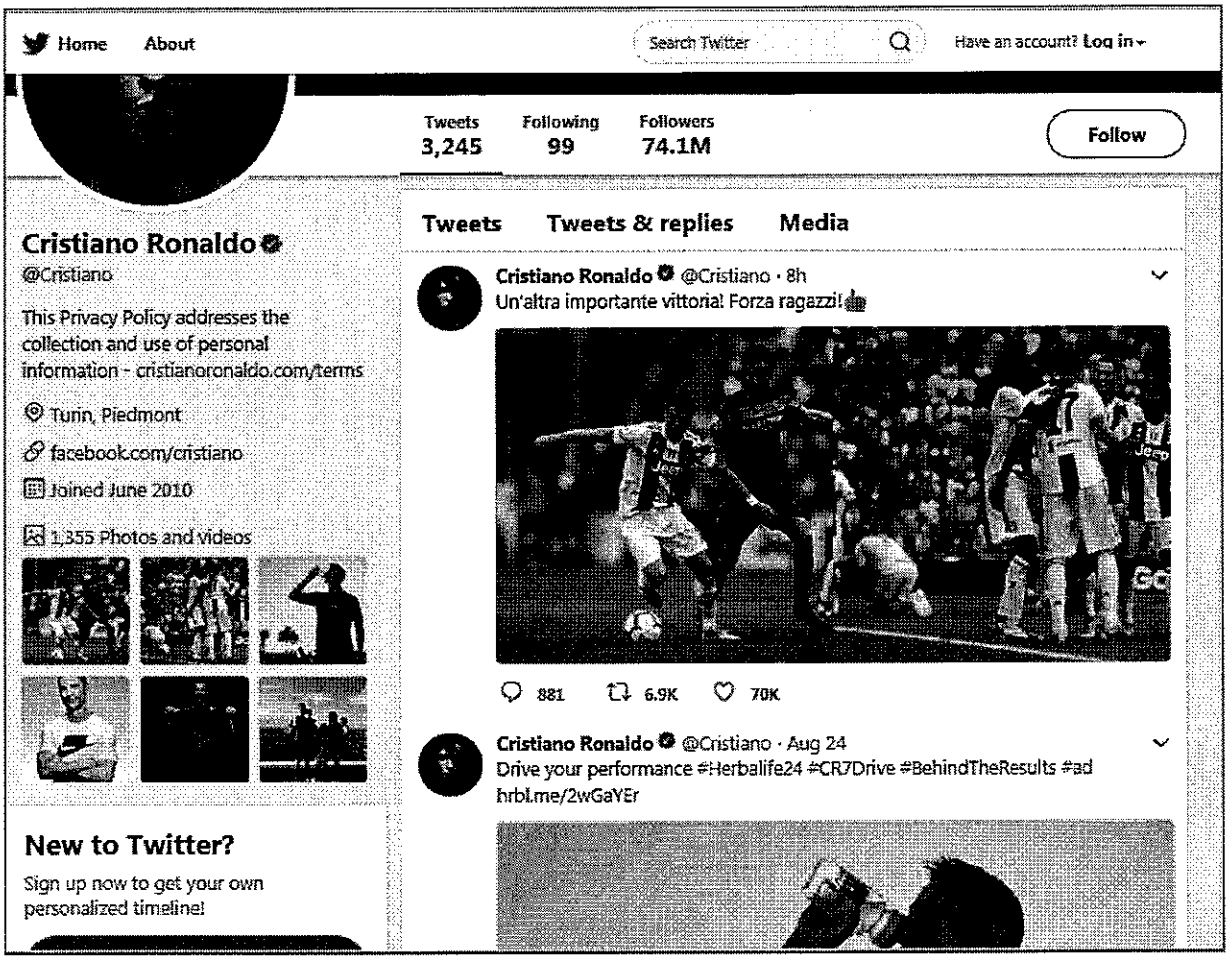
b) SOAP, WSDL and UDDI are among the technologies involved in the Service Oriented Architecture. What happen if we do not have WSDL and UDDI? Can we still consume the services? [3 marks]

c) What is the advantage of generating a website from XML document using XSLT as compare to creating a website by writing the HTML code? [1 mark]

d) XML allows data to be stored using elements and attributes. Explain in what condition that the data is more suitable to be stored as an attribute? Provide an example to help justify your answer. [2 marks]

Continued.....

Question 2



a) Write the DTD for the above website. [4 marks]

b) Write the XML Schema that is equivalent to the DTD in question 2(a). [4 marks]

c) Write one (1) XML document that conforms to the DTD in question 2(a). [2 marks]

Continued.....

Question 3

a) Consider the following C# code.

```
[WebMethod]
public Item itemBooking(string itemId, float itemPrice, string[] description)
{
  // implementation omitted
}

public class Item {
    public string itemAvailabilityStatus;
    public int quantity;
    private float costPrice;
    public string currentItemAvailabilityStatus()
    {
        return itemAvailabilityStatus;
    }
}
```

Write the SOAP request for the above web method. [4 marks]

b) Write the SOAP response for the above web method. [4 marks]

c) List down two possible causes that prevent SOAP request to be processed. [2 marks]

Continued.....

Question 4

a) Consider the following C# code.

```
public class CurrencyConverter
{
[WebMethod]
public float GetCurrency(string fromCurrency, string toCurrency)
{
  //Implementation omitted
}
[WebMethod]
public string GetCurrencyAnalysis(string currency)
{
  //Implementation omitted
}
}
```

Write the <types> element of the WSDL that describes all the functions. [4 marks]

b) Why UDDI is less popular nowadays to discover a service? List down two alternatives on how services can be discovered. [3 marks]

c) How do the quality of service are measured? [3 marks]

End of Page.